

PH 305 - Epidemiology

3 Credit Hours

As long as humans have existed on this planet, microbes have coexisted with us, providing health benefits and potentially posing a silent and constant threat. In this introductory course in human microbial disease, students explore the history of epidemiology and how various microbes have impacted our lives, identify the characteristics of various pathogens and infectious agents, explain how diseases spread, and learn about the biological human immune response to foreign pathogens. Students will learn the principles and methods of disease investigation: investigating patterns of illness in populations, identifying infectious microbes by visual assessment, mode of infection, symptoms, treatment, prevention and cure. Types of study designs, how population health for a particular health outcome is measured, and special topics in epidemiology (eg. genetic/molecular epidemiology, environmental epidemiology, forensic epidemiology) are also covered. (Prerequisite:GC 111 Mathematics)(from Mathematics II)

Prerequisites

[GE 102](#) [GC 111](#) [BG 110](#)